

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

Claim 1 (Currently amended): An image pickup apparatus, comprising:

an image pickup circuit which photoelectrically converts, into pixel signals, a light image formed through a lens; and

~~a setting controller which sets an image pickup mode selected from among a plurality of image pickup modes,~~

~~said plurality of image pickup modes including at least a first mode in which the pixel signals obtained by said image pickup circuit are reduced by extracting pixel signals of a predetermined continuous area from the pixel signals outputted by a first area of said image pickup circuit, a second mode in which the pixel signals obtained by said image pickup circuit are reduced by thinning out the pixel signals obtained in different tack from said first mode;~~

~~wherein the first area of said image pickup circuit becomes narrower and the depth of field becomes deeper when said first mode is shifted to said second mode~~

a setting unit which sets at least a first image pickup mode in which the pixel signals are reduced by extracting a predetermined area from an image pickup area of said image pickup circuit and a second image pickup mode in which the pixel signals are obtained from a larger area than said predetermined area by reducing the pixel signals in different reducing method of said first mode; and

a controlling unit which controls to lengthen a focal length of said lens depending on a change from said first image pickup mode to said second image pickup mode.

Claim 2 (Currently amended): An image pickup apparatus according to claim 1, wherein said setting unit further sets an image pickup mode for picking up a still image in which pixel signals are read out from whole area of said image pickup area ~~the image pickup mode to be set for picking up a moving image differs from the image pickup mode to be set for picking up a still image and said plurality of image pickup modes includes a third mode in which the pixel signals obtained by said image pickup circuit are not reduced more than in the first and second modes.~~

Claim 3 (Canceled).

Claim 4 (Original): An image pickup apparatus according to claim 1, wherein the image pickup mode is set according to an object an image of which is to be picked up.

Claim 5 (Original): An image pickup apparatus according to claim 1, wherein said setting controller sets the image pickup mode on the basis of evaluation values obtained from at least two distance measuring points.

Claim 6 (Original): An image processing system having a plurality of apparatuses communicatively interconnected, wherein at least one of said plurality of apparatuses has a function of an image pickup apparatus according to claim 1.

Claims 7-12 (Canceled).

Claim 13 (Currently amended): An image pickup method, comprising:
a photoelectric conversion step of photoelectrically converting, by an image pickup circuit, into pixel signals, a light image formed through a lens;
~~a setting step of setting an image pickup mode selected from among a plurality of image pickup modes,~~

~~said plurality of image pickup modes including at least a first mode in which the pixel signals obtained by said image pickup circuit are reduced by extracting pixel signals of a predetermined continuous area from the pixel signals outputted by a first area of said image pickup circuit, a second mode in which the pixel signals obtained by said image pickup circuit are reduced by thinning out the pixel signals obtained in different tack from said first mode;~~

~~wherein the first area of said image pickup circuit becomes narrower and the depth of field becomes deeper when said first mode is shifted to said second mode~~

a setting step of setting at least a first image pickup mode in which the pixel signals are reduced by extracting a predetermined area from an image pickup area of said image pickup circuit and a second image pickup mode in which the pixel signals are obtained from a larger area than said predetermined area by reducing the pixel signals in different reducing method of said first mode; and

a controlling step of controlling to lengthen a focal length of said lens depending on a change from said first image pickup mode to said second image pickup mode.

Claim 14-22 (Canceled).

Claim 23 (Currently amended): A storage medium which stores therein, in a computer-readable manner, a processing program for executing a function of an image pickup apparatus having a photoelectric conversion circuit which photoelectrically converts, by an image pickup circuit, into pixel signals, a light image formed through a lens,

said processing program having: ~~a setting code for setting an image pickup mode selected from among a plurality of image pickup modes;~~

~~said plurality of image pickup modes including at least a first mode in which the pixel signals obtained by said image pickup circuit are reduced by extracting pixel signals of a~~

~~predetermined continuous area from the pixel signals obtained by said image pickup circuit, a second mode in which the pixel signals outputted by a first area of said image pickup circuit are reduced by thinning out the pixel signals obtained in different task from said first mode;~~

~~wherein the first area of said image pickup circuit becomes narrower and the depth of field becomes deeper when said first mode is shifted to said second mode.~~

a setting code for setting at least a first image pickup mode in which the pixel signals are reduced by extracting a predetermined area from an image pickup area of said image pickup circuit and a second image pickup mode in which the pixel signals are obtained from a larger area than said predetermined area by reducing the pixel signals in different reducing method of said first mode; and

a controlling code for controlling to lengthen a focal length of said lens depending on a change from said first image pickup mode to said second image pickup mode

Claim 24 (Canceled).

Claim 25. (New): An image pickup apparatus, comprising:

an image pickup circuit which photoelectrically converts, into pixel signals, a light image formed through a lens;

a setting unit which sets at least a first image pickup mode in which the pixel signals from said image pickup circuit are reduced and a second image pickup mode which is different from said the first mode ; and

a controlling unit which controls to change a focal length of said lens depending on a change from said first image pickup mode to said second image pickup mode,

wherein said setting unit sets different method for reducing pixel signals from said image pickup circuit between said first image pickup mode and said second image pickup mode.

Claim 26 (New): An image pickup apparatus according to claim 25, wherein said controlling unit controls said focal length of said lens in order to adjust variation in an angle of view caused by the change from said first image pickup mode and said second image pickup mode.

Claim 27. (New): An image pickup apparatus, comprising:

an image pickup circuit which photoelectrically converts, into pixel signals, a light image formed through a lens;

a setting unit which sets at least a first image pickup mode in which the pixel signals are reduced by extracting a predetermined area from an image pickup area of said image pickup circuit and a second image pickup mode in which the pixel signals are obtained from a larger area than said predetermined area by reducing the pixel signals in different reducing method of said first mode; and

a controlling unit which controls to shorten a focal length of said lens depending on a change from said second image pickup mode to said first image pickup mode.